

## **High MPV and downregulation of GLUT1 as COVID-19 bio-markers**

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by Anthony of Boston**

**Simultaneously lowering the mean platelet volume(MPV) and elevating GLUT1 expression may be the two main tasks associated with fighting COVID-19 and its many variants. I wrote 2 papers; one about how mean platelet volume affects COVID-19 severity**

**<https://www.academia.edu/50765554/>**

**Vitamin E COVID 19 Platelet Information**

**and another about how GLUT1 expression also plays a role in COVID-19**

**<https://www.academia.edu/50794617/>**

**Vitamin C COVID 19 Notes**

**I presume based on my research that both high MPV and down-regulated GLUT1 expression may advance the pathogenesis of COVID-19. Similar to those infected with COVID-19, a high MPV level and downregulated GLUT-1 were also found in those with Type 2 Diabetes Mellitus and hyperglycemia. This underscores research that links COVID-19 to higher blood glucose, higher MPV, and downregulation of GLUT1 transporter protein expression.**

**While altering these factors could subvert the pathogenesis of COVID 19, researchers must be aware that reversal of high MPV and downregulation of GLUT-1 could raise risk factors for cancer and tumor growth. Contrary to COVID-19, Cancers have been linked to lower MPV and upregulation of GLUT-1. This pendulum swing may indicate that as influenza and coronavirus illnesses rise, cancer rates may drop and vice versa. I would hope that researchers look into how raising risk in one area lowers risk in another and how that perspective should become a part of medical nomenclature. Understanding and controlling this pendulum swing may be key in advancing medical research.**

**High MPV and downregulation of GLUT1 as COVID-19 bio-markers**

### **Bibliography**

**Expression of GLUT1 in tumors promotes cancer cell survival**  
**[https://cancerres.aacrjournals.org/content/65/9\\_Supplement/531.4](https://cancerres.aacrjournals.org/content/65/9_Supplement/531.4)**

**(significantly higher MPV found in diabetic patients.**  
**<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3425267/>**

**(Diabetes downregulates GLUT1 expression in the retina and its microvessels but not in the cerebral cortex or its microvessels)**  
**<https://pubmed.ncbi.nlm.nih.gov/10866055/>**

**(Mean platelet volume as a possible biomarker of tumor progression in rectal cancer)**  
**<https://pubmed.ncbi.nlm.nih.gov/27802192/>**

**Vitamin E Platelet information**  
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